i. embankment construction using recycled waste materials;

j. embankments over landfills;

k. foundations; and/or

l. dewatering.

1. Field Equipment. The report will list where field monitoring equipment and/or devices including settlement plates, lateral stakes, settlement stakes, standpipe piezometers, or water monitoring boreholes are required. The report will list the following:

a. purpose and/or objective of the equipment;
b. proposed locations;
c. approximate schedule for the frequency of readings; and
d. any special construction controls.

The designer must note the location and quantities of the field monitoring equipment to be installed. The equipment should be included in the construction plans, in a tabular format, and in the schedule of pay items. Such equipment is described in the INDOT *Standard Specifications*.

2. Boring Logs. Boring logs will be included in the appendix of the geotechnical report. These will be based on field logs and laboratory test data. Boring logs are generally available in an electronic format for in-house projects.

18-1.03 Test Data and Engineering Analyses

The report will summarize the field and laboratory investigation procedures used in the investigations. Results of the laboratory tests on various samples will be included in the appendix of the geotechnical report in a tabular format. Each sample will be identified according to its sample number, boring number, location, depth and results from any testing. Separate tabulations will be included for classification test results, strength test results and other special test results.

The work described in this section will include a review and correlation of the various test results for embankment stability, material placement and other geotechnical engineering considerations.

Sketches, assumptions, calculations, etc., will be provided in the appendix of the report. Some analyses that may be included are as follows:

1. settlement analysis;
2. sand drain analysis;
3. sliding block slope stability analysis;
4. rotational slope stability analysis;
5. bridge foundation analysis for each bridge foundation; and/or
6. retaining structure analysis.

18-1.04 Geotechnical Profile

The geotechnical profile, when required, shows the geotechnical information on a set of plans. The following is applicable design and construction information that may be included in the geotechnical profile.

1. Soil Test Data. Soil test data will be tabulated on separate sheets. This may include the information as follows:

    a. laboratory sample number;
    b. field sample number;
    c. boring number;
    d. station;
    e. offset;
    f. depth of sample;
    g. pH;
    h. textural or grain size classification;
    i. AASHTO classification;
    j. test results obtained from mechanical analysis;
    k. liquid limit;
    l. plastic limit;
    m. plasticity index;
    n. maximum dry density;
    o. optimum moisture content;
    p. CBR;
    q. loss on ignition; and
    r. calcium and magnesium.